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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,308	10/18/2000	Ole Henry Dorum	N0071 US	5225

7590 04/01/2003

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EXAMINER	
PHAM, HUNG Q	

ART UNIT	PAPER NUMBER
2172	9

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/691,308	DORUM ET AL.	
	Examiner	Art Unit	
	HUNG Q PHAM	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 6-8, 10-11, 13, 16-20, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1].

Regarding to claim 1, Ogawa teaches a method for updating a three-dimensional digital map of an area, supplementing insufficient information and determining an area in which a large number of changes of objects occur by utilizing an image obtained by imaging the area (Ogawa, Col. 1, line 64-Col. 2, line 8). As shown in FIG. 2, at step 200, the image means 101 inputs digital images such as aerial photographs or satellite photographs for processing (Ogawa, Col. 6, lines 15-25) as the step of ***obtaining satellite images of areas***. A three-dimensional digital map as ***the master copy*** is retrieved from the map file as ***the geographic database*** inside the memory 100 at step 203 for calculating the coordinates and collating the map with the image at step 204-207 (Ogawa, Col. 6, line 26-Col. 9, line 17). The points or map change points at which the change has occurred is stipulated at step 208 and the three-dimensional digital map is edited on the basis of the map change points at step 210 (Ogawa, Col. 9, line 18-Col. 11, line 57). The process 204-208 as taught by Ogawa indicates the step of ***determining from the satellite images appropriate changes to make to the master copy of the geographic database to correct said errors in said data that represent said geographic features***. Ogawa further discloses the digital images taken by satellite photograph are periodically down-loaded by a scanner or through the network (Ogawa, Col. 6, lines 15-25) but fails to teach the satellite images of areas is obtained based upon reports about errors in data that represent

geographic features located in said areas. Breed teaches a method for determining the location and orientation of a host vehicle operating on a roadway and location of multiple moving or fixed obstacles that represent potential collision hazards with the host vehicle to thereby eliminate collisions with such hazards (Breed, Col. 1, lines 20-61). Breed further discloses the step of ***reporting about errors in data that represent geographic features located in said areas*** (Breed, Col. 53, line 51-Col. 55, line 22, especially Col. 55, lines 7-15). Thus, based up on a report, a satellite image of the area could be obtained for correcting errors in the geographic database. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa method by including the step of obtaining the images based upon report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 6, Ogawa teaches a method for updating a three-dimensional digital map of an area, supplementing insufficient information and determining an area in which a large number of changes of objects occur by utilizing an image obtained by imaging the area (Ogawa, Col. 1, line 64-Col. 2, line 8). As shown in FIG. 2, at step 200, the image means 101 inputs digital images such as aerial photographs or satellite photographs for processing (Ogawa, Col. 6, lines 15-25) as the step of ***obtaining a satellite image of the geographic location***. A three-dimensional digital map as ***the master copy*** is retrieved from the map file as ***the geographic database*** inside the memory 100 at step 203 for calculating the coordinates and collating the map with the image at step

204-207 (Ogawa, Col. 6, line 26-Col. 9, line 17). The points or map change points at which the change has occurred is stipulated at step 208 and the three-dimensional digital map is edited on the basis of the map change points at step 210 (Ogawa, Col. 9, line 18-Col. 11, line 57). The process 204-208 as taught by Ogawa indicates the step of ***analyzing the satellite image to determine how to update the master copy of the geographic database and updating the master copy of the geographic database***. Ogawa further discloses the digital images taken by satellite photograph are periodically down-loaded by a scanner or through the network (Ogawa, Col. 6, lines 15-25) but fails to teach the step of ***obtaining a report relating to at least one geographic feature of a geographic location***. Breed teaches a method for determining the location and orientation of a host vehicle operating on a roadway and location of multiple moving or fixed obstacles that represent potential collision hazards with the host vehicle to thereby eliminate collisions with such hazards (Breed, Col. 1, lines 20-61). Breed further discloses as the roadway is being mapped, the availability of GPS satellite view and the presence of multipath reflections from fixed structures can also be determined. This information can then be used to determine the advisability of locating a local precise location system, or other infrastructure, at a particular spot on the roadway. Cars can also be used as probes for this process and for continuous improvement to check the validity of the maps and report any errors (Breed, Col. 53, line 51-Col. 55, line 22, especially Col. 55, lines 7-15). This technique indicates the step of ***obtaining a report relating to at least one geographic feature of a geographic location***. Thus, based up on a report, a satellite image of the area could be obtained for correcting errors in the geographic database. Therefore, it would

have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa method by including the step of obtaining the images based upon report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 7, Ogawa and Washington Post Company teaches all the claimed subject matters as discussed in claim 6, but fails to disclose: ***the satellite image is obtained by ordering from a commercial satellite image provider***. However, Ogawa shows that digital images are inputted by reading aerial photographs or satellite photographs by a scanner, or down-loading the digital images through the network (Ogawa, 6, lines 15-25). When downloading the digital images through the network and if the website from that the images come could be downloaded is a commercial satellite image provider, obviously, the step of ordering has to be occurred for obtaining the images. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Washington Post Company method by including the step of ordering in order to download a particular satellite image.

Regarding to claim 8, Ogawa and Washington Post Company teaches all the claimed subject matters as discussed in claim 6, but fails to disclose: ***prior to obtaining the satellite image, confirming that a current satellite images is not available in a satellite image archive; and then ordering the satellite image from a commercial satellite image provider***. However, Ogawa further shows that the digital images are inputted from a

database or the network (Ogawa, Col. 5, lines 4-14). Thus, if the images are not available in the database after confirming process, a digital image could be obtained by ordering as discussed in claim 7. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Washington Post Company method by including the step of confirming before ordering the digital images in order to avoid duplicate digital images in the database.

Regarding to claim 10, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, Ogawa further discloses the step of: ***after the step of obtaining the satellite image, displaying the satellite image at a workstation of a geographic database developer*** (Ogawa, Col. 6, lines 1-6).

Regarding to claim 11, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 10, Ogawa further discloses the step of ***indicating a position on the satellite image being displayed wherein the position corresponds to the reported geographic location*** (Ogawa, Col. 6, lines 39-54).

Regarding to claim 13, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, Ogawa further discloses ***while displaying the satellite image at a workstation of a geographic database researcher, displaying geographic features represented by data contained in the master copy of the geographic database at a workstation indicating a***

position on the satellite image being displayed wherein the position corresponds to the reported geographic location (Ogawa, Col. 6, lines 1-6).

Regarding to claim 16, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 10, but fails to disclose: ***while displaying the satellite image at a workstation of a geographic database developer, displaying the report submitted by an end user including explanatory text provided therewith***. However, a conventional communication between a user and a server such as a phone line or e-mail could be set up to receive report from commuter if a change has occurred between the two downloads for updating the digital map. Thus, the explanatory text from e-mails could be displayed while displaying the satellite image. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Washington Post Company by including the step of displaying report including text while displaying the satellite image in order to support a user when comparing the reports and images in an interactive manner.

Regarding to claim 17, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose the step of ***providing an on-line program accessible to the end users; and with the on-line program, allowing the end user to submit the report***. However, a conventional communication between a user and a server such as a phone line or e-mail could be set up to receive report from commuter if a change has occurred between the two downloads for updating the digital map and obviously.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Washington Post Company method by including the step of providing an on-line program for submitting the report in order to communicate with each other.

Regarding to claim 18, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, Ogawa further discloses the ***satellite image is obtained from an archive*** (Ogawa, Col. 5, lines 4-14).

Regarding to claim 19, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 18, Ogawa further discloses the step: ***prior to analyzing said satellite image, confirming that said satellite image was taken recently enough depending on a type of updating to be made to said master copy of said geographic database*** (Ogawa, Col. 6, lines 15-54).

Regarding to claim 20, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, Ogawa further discloses: ***the satellite image is obtained from a central server of a geographic database developer*** (Ogawa, Col. 5, lines 4-14).

Regarding to claim 22, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to roadway geometry***. However, Ogawa teaches that the method is to provide a map-editing device, which can

easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of roadway geometry. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the roadway geometry report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 23, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to a placement of a roadway divider***. However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of placement of a roadway divider. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the placement of a roadway divider report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 24, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to a number of roadway lane.*** However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has

changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of number of roadway lane. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the number of roadway lane report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 25, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to roadway lane widths***. However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of roadway lane widths. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the roadway lane widths report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 26, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to roadway direction restrictions***. However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of roadway direction restriction. Therefore, it

would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the roadway direction restriction report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 27, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to a turn restriction along a road***. However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of a turn restriction along a road. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the turn restriction along a road report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 28, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to whether a road is paved.*** However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report of whether a road is paved. Therefore, it would have been obvious for

one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the report relates to whether a road is paved in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 29, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose ***the report relates to a lake, river, park or recreational area***. However, Ogawa teaches that the method is to provide a map-editing device, which can easily supplement insufficient information and can easily remeasure an object that has changed (Ogawa, Col. 1, line 64-Col. 2, line 7). Thus, a report as discussed in claim 6 could be a report relates to a lake, river, park or recreational area. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the lake, river, park or recreational area report in order to update the digital map right at the time a change has occurred in an area.

Regarding to claim 30, Ogawa teaches a method for updating a three-dimensional digital map of an area, supplementing insufficient information and determining an area in which a large number of changes of objects occur by utilizing an image obtained by imaging the area (Ogawa, Col. 1, line 64-Col. 2, line 8). As shown in FIG. 2, at step 200, the image means 101 inputs digital images such as aerial photographs or satellite photographs for processing (Ogawa, Col. 6, lines 15-25) as the step of ***obtaining a satellite image of the geographic location***. A three-dimensional digital

map as ***the master copy*** is retrieved from the map file as ***the geographic database*** inside the memory 100 at step 203 for calculating the coordinates and collating the map with the image at step 204-207 (Ogawa, Col. 6, line 26-Col. 9, line 17). The points or map change points at which the change has occurred is stipulated at step 208 and the three-dimensional digital map is edited on the basis of the map change points at step 210 (Ogawa, Col. 9, line 18-Col. 11, line 57). The process 204-208 as taught by Ogawa indicates the step of ***analyzing the satellite image to determine a correction to the data, said correction to the data accurately representing the geographic feature; and updating the geographic database with the correction***. Ogawa further discloses the digital images taken by satellite photograph are periodically down-loaded by a scanner or through the network (Ogawa, Col. 6, lines 15-25) but fails to teach the step of ***obtaining a report indicating a location corresponding to data inaccurately representing the geographic feature in a geographic region***. Breed teaches a method for determining the location and orientation of a host vehicle operating on a roadway and location of multiple moving or fixed obstacles that represent potential collision hazards with the host vehicle to thereby eliminate collisions with such hazards (Breed, Col. 1, lines 20-61). Breed further discloses as the roadway is being mapped, the availability of GPS satellite view and the presence of multipath reflections from fixed structures can also be determined. This information can then be used to determine the advisability of locating a local precise location system, or other infrastructure, at a particular spot on the roadway. Cars can also be used as probes for this process and for continuous improvement to check the validity of the maps and report any errors (Breed, Col. 53, line 51-Col. 55, line 22,

especially Col. 55, lines 7-15). This technique indicates the step of ***obtaining a report indicating a location corresponding to data inaccurately representing the geographic feature in a geographic region***. Thus, based up on a report, a satellite image of the area could be obtained for correcting errors in the geographic database. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa method by including the step of obtaining the images based upon report in order to update the digital map right at the time a change has occurred in an area.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Heres et al. [GDF A proposed standard for digital road maps to be use in car navigation system].

Regarding to claim 2, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 1, but fails to disclose the step of ***grouping reports about errors that relate to the same geographic feature***. Heres teaches a proposed standard for digital road maps to be used in car navigation system, in which a car navigation system will show the current location of the car and a part of the planned route on the background of a road map. Obviously, a commuter could report a change has occurred by indicating the location also displayed geographic data from the navigation system and report could be grouped by location for updating the digital map. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the

Ogawa and Breed method by including the step of grouping in order to organize the received data.

Regarding to claim 3, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 1, but fails to disclose the step of ***grouping reports about errors that relate to the same geographic feature so that only one satellite image needs to be obtained to determine the appropriate change to make to the master copy of the geographic database with respect to the data that represent that represent that geographic feature***. However, Ogawa shows that the Image input means 101 inputs an image from a scanner or a network and imaging parameters such as the position, direction, focal length, etc. Heres teaches a proposed standard for digital road maps to be used in car navigation system, in which a car navigation system will show the current location of the car and a part of the planned route on the background of a road map. Obviously, a commuter could report a change has occurred by indicating the location also displayed geographic data from the navigation system and report could be grouped by location in order to obtain only one satellite image for a group of report has the same location. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the step of grouping for obtaining only one satellite image in order to avoid duplicate deleting or adding data.

Regarding to claim 4, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 1, but fails to disclose the step of ***grouping reports about errors that***

relate to geographic features that are located close to each other so that only one satellite image needs to be obtained to determine the appropriate changes to make to the master copy of the geographic database with respect to the data that represent those geographic features. However, Ogawa shows that the Image input means 101 inputs an image from a scanner or a network and imaging parameters such as the position, direction, focal length, etc. Heres teaches a proposed standard for digital road maps to be used in car navigation system, in which a car navigation system will show the current location of the car and a part of the planned route on the background of a road map. Obviously, a commuter could report a change has occurred by indicating the location also displayed geographic data from the navigation system and report could be grouped by location that are close to each other in order to obtain only one satellite image for a group of report has a close location. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed by including the step of grouping for obtaining only one satellite image in order to avoid duplicate deleting or adding data.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Stilp [USP 6,317,081 B1].

Regarding to claim 5, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 1, but fails to disclose the step of ***assigning a higher priority to***

report about errors that relate to the same geographic feature. Stilp teaches an internal calibration method for supporting a variety of messages and each message type is assigned a priority, such that a higher priority message is sent before a lower priority message (Stilp, Col. 20, line 58-Col. 21, line 4) and in addition, if there are several reports about errors in the same location, those reports should be taken care of with high priority. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by assigning a higher priority to report that has the same geographic feature in order to update the geographic database in a timely manner.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Fowler [Sources of Satellite Imagery].

Regarding to claim 9, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose the ***satellite image has at least approximately 1 meter accuracy***. However, Ogawa teaches that the method is for assisting to update a three-dimensional digital map of an area by using images obtained by imaging the area, and obviously, the accuracy of the digital map depends on the accuracy of the satellite images. Fowler discloses sources of satellite image providers such as IKONOS with 1-meter remote sensing satellite, which enables users to distinguish ground features as small as one meter (Fowler, Sources of Satellite Imagery). Therefore, it would have

been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by restricting the satellite image to at least 1-meter accuracy as discloses by Fowler in order to increase the accuracy of the digital map.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Nagai [USP 6,138,072].

Regarding to claim 12, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose the step of ***indicating latitude and longitude coordinates corresponding to a position of a movable cursor***. Nagai teaches the step of ***indicating latitude and longitude coordinates corresponding to a position of a movable cursor*** (Nagai, Col. 6, lines 22-29). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by including the step of indicating latitude and longitude by a movable cursor as taught by Nagai in order assist a user when navigating a digital map on the screen of a computer.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Truong [USP 5,099,331].

Regarding to claim 14, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 13, but fails to disclose the step of ***overlaying the geographic features represented by the data contained in the master copy of the geographic database over the satellite image being displayed at the workstation***. Truong teaches a method for overlaying an image with the original image (Truong, Col. 7, lines 40-57). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by including the technique of overlaying in order to support a user when making selection between images in an interactive manner.

Regarding to claim 15, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 13, but fails to disclose the step of ***displaying the geographic features represented by the data contained in the master copy of the geographic database and the satellite image side-by-side on the workstation***. Truong teaches a method for displaying the images side-by-side on the workstation (Truong, Col. 7, lines 40-57). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by including the technique of displaying the images side-by-side in order to support a user when comparing the difference between images in an interactive manner.

9. Claim 21 is r jected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. [USP 5,864,632] in view of Breed et al. [USP 6,405,132 B1] and Peschke [USP 6,397,143].

Regarding to claim 21, Ogawa and Breed teaches all the claimed subject matters as discussed in claim 6, but fails to disclose the step of ***defining a grid that overlays a geographic coverage area corresponding to said geographic database, wherein said satellite image corresponds to a cell of said grid***. Peschke teaches a method for navigating and displaying a computer-based map (Peschke, Col. 1, lines 5-10). As shown in FIG. 2A-C, a grid is defined and overlaid a geographic coverage area; each of the icons 108 correspond to one or more cells is hyperlinked to a lower level screen, which provides more detailed information (Peschke, Col. 4, line 60-Col. 5, line 47). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Ogawa and Breed method by including the step of defining a grid and satellite image corresponds to a cell of grid in order to map a satellite image to a geographic area.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Pham whose telephone number is 703-605 4242. The examiner can normally be reached on Monday-Friday, 7:00 Am - 3:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VU, KIM YEN can be reached on 703-305 4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746 7239 for regular communications and 703-746 7238 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305 3900.

Examiner: Hung Pham
March 17, 2003

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